

**VERSION WITH MARKINGS TO SHOW CHANGES  
MADE TO THE APPLICATION**

In the Specification

The paragraph beginning on page 1, line 6 was amended as follows:

This application is a continuation of 08/853,370, filed May 8, 1997, which is a continuation-in-part of 08/563,762, filed November 29, 1995, and claims the benefit of U.S. provisional application 60/017,260, filed May 10, 1996, the disclosures of which are incorporated by reference in their entirety for all purposes.

The paragraph beginning on page 4, line 23 was amended as follows:

e) [(e)] using principal component analysis, identifying a polymorphism by comparing normalized differences between individuals in a population.

The paragraph beginning on page 4, line 30 was amended as follows:

Figure 2A shows a schematic representation of a single oligonucleotide array containing 78 separate detection blocks. Figure 2B shows a schematic illustration of a detection block for a specific polymorphism denoted WI-567 (TGCTGCCTTGGTTCRAGCCCTCATCTCTTT, SEQ ID NO:1). Figure 2B also shows the triplet layout of detection blocks for the polymorphism employing 20-mer oligonucleotide probes having substitutions 7, 10 and 13 bp from the 3' end of the probe (AACCAANCTCGGGAGTAGAG, SEQ ID NO:2; CGGAACCAANCTCGGGAGTA, SEQ ID NO:3; CGACGGAACCAANCTCGGGA, SEQ ID NO:4). The probes present in the shaded portions of each detection block are shown adjacent to each detection block.

The paragraph beginning on page 5, line 1 was amended as follows:

Figure 3 illustrates a tiling strategy for a polymorphism denoted WI-567, and having the sequence 5'-TGCTGCCTTGGTTC[A/G]AGCCCTCATCTCTTT-3' (TGCTGCCTTGGTTCRAGCCCTCATCTCTTT, SEQ ID NO:1). A detection block specific for the WI-567 polymorphism is shown with the probe sequences tiled therein listed above (ACGGAACCANGTTCGGGAGT, SEQ ID NO:5; ACGGAACCANGCTCGGGAGT, SEQ ID NO:6; CGGAACCAANTTCGGGAGTA, SEQ ID NO:7; CGGAACCAANCTCGGGAGTA, SEQ ID NO:8; GGAACCAAGNTCGGGAGTAG, SEQ ID NO:9; GAACCAAGTNCGGGAGTAGA, SEQ ID NO:10; GAACCAAGCNCGGGAGTAGA, SEQ ID

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NO:11; AACCAAGTTNGGGAGTAGAG, SEQ ID NO:12; AACCAAGCTNGGGAGTAGAG, SEQ ID NO:13). Predicted patterns for both homozygous forms and the heterozygous form are shown at the bottom.

The paragraph beginning on page 5, line 8 was amended as follows:

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Figure 4 shows a schematic representation of a detection block specific for the polymorphism denoted WI-1959 having the sequence 5'-

ACCAAAAATCAGTC[T/C]GGGTAAGTGAAGTG-3'

(ACCAAAAATCAGTCYGGGTAAGTGAAGTG, SEQ ID NO:14) with the polymorphism indicated by the brackets. A fluorescent scan of hybridization of the heterozygous and both homozygous forms are shown in the center, with the predicted hybridization pattern for each being indicated below.

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